What is claimed is:

- 1. A belt force measuring device, comprising:
- a measuring spring, the expansion of which is a measure of the belt force;
 - a detector which is arranged on the measuring spring rigidly to a first bearing of the measuring spring; and
 - a sensor element which is arranged on the measuring spring rigidly to a second bearing of the measuring spring, the measuring spring being arranged and formed such that it expands between the first and second bearing as a function of the belt force.
- 2. The belt force measuring device according to claim 1, wherein the measuring spring is arranged such that expansion as a function of the belt force is limited by a play of a locking tab mounted with the play in a housing of the belt force measuring device.
- 20 3. The belt force measuring device according to claim 1, wherein the measuring spring is mounted flexibly in the first and second bearing.
- 4. The belt force measuring device according to claim 1, wherein the detector is located on the measuring spring so that it cannot rotate.
- 5. The belt force measuring device according to claim 1, wherein the sensor element is located on the measuring spring so it that cannot rotate.
 - 6. The belt force measuring device according to claim 1, wherein the measuring spring is formed from spring steel strip.